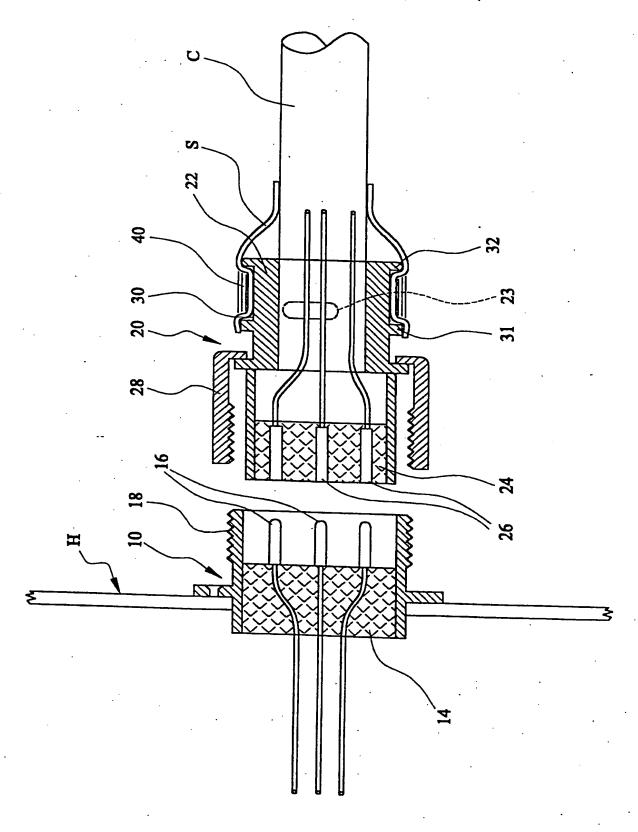
(12) PATENT APPLICATION (11) Application No. AU 200035321 A1 (19) AUSTRALIAN PATENT OFFICE (54)Title **Electrical connector**  $(51)^7$ International Patent Classification(s) H01R 013/623 H01R 013/62 H01R 004/56 (21) Application No: 200035321 (22)Application Date: 2000.05.15 (30)**Priority Data** (31) Number (32) Date (33) Country 9918533 1999.08.06 GB (43)Publication Date: 2001.02.08 Publication Journal Date: 2001.02.08 (43)(71) Applicant(s)
Bowthorpe pic. (72)Inventor(s) Roger Philip Bonas (74)Agent/Attorney HALFORD and CO., No.1 Market Street, SYDNEY NSW 2000



being arranged to terminate an electrical cable and comprising a one-piece body part which houses means for receiving and terminating the ends of the conductors of the cable and includes an outer circumferential surface for overlapping by 5 a shield of the cable, and a spring in the form of a coiled metal ribbon for wrapping around the portion of cable shield which overlaps said outer circumferential surface of said one-piece body part.

Also in accordance with the present invention, there is provided an electrical connector part which is arranged for coupling to a mating connector part and comprises a one-piece body part which houses means for receiving and terminating the ends of the conductors of the cable, said one-piece body part including an outer circumferential surface for overlapping by a shield of the cable, and a spring in the form of a coiled metal ribbon for wrapping around the portion of cable shield which overlaps said outer circumferential surface of said one-piece body part.

The two parts of the connector may couple together by
20 means of a rotatable coupling nut carried by either of the
parts, arranged to engage with a screw thread formed on the
other part. Instead, other forms of coupling between the two
parts may be employed, for example a bayonet coupling.

## BRIEF DESCRIPTION OF THE DRAWING

An embodiment of the present invention will now be described by way of example only and with reference to the accompanying drawings, the single Figure of which is a schematic longitudinal section through an electrical connector in accordance with the present invention.

## 30 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to the drawings, there is shown an electrical connector which comprises a first part 10 fixed to an equipment

with the requirement for a backshell or backshell adaptor, the connector part is of simpler construction, lighter in weight, and of reduced cost. Moreover, the arrangement reduces the number of joints in the electrical shield, which must be 5 maintained in continuity from the cable to the equipment housing, and so improves the overall shielding performance.

The body 22 of the connector part 20 may be formed with at least one slot 23, shown in the example as extending circumferentially: this slot enables inner shields of the 10 cable, which are sometimes provided around one or more groups of the cable conductors, to be brought out onto the outer surface 30, against which these shields or braids are embraced to effect continuity of the shielding by the constant force spring 40.

body part.

- 5) A connector part as claimed in claim 4, carrying a rotatable coupling nut arranged to engage with a screw thread formed on said mating connector part.
- A connector part as claimed in claim 4, formed with a screw thread for engagement by a rotatable coupling and carried by said mating connector part.
- 7) A connector part as claimed in claim 4, arranged to couple to said mating connector part by means of a bayonet 10 coupling.

Dated this 15th day of May 2000

BOWTHORPE PLC
PATENT ATTORNEYS FOR THE APPLICANT
HALFORD & CO